

water absorbing + water-insoluble ben(c)

L8 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 9012-76-4 REGISTRY

CN **Chitosan (8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN 100D-VL

CN Biopolymer L 112

CN Chicol

CN Chitan, N-acetyl-

CN Chitin, N-deacetyl-

CN Chitofine

CN Chitofos

CN Chitoparl 3510

CN Chitoparl BC 3000

CN Chitoparl BCW 2500

CN Chitoparl BCW 3000

CN Chitoparl BCW 3500

CN Chitoparl BCW 3505

CN Chitoparl BCW 3507

CN Chitosan 500

CN Chitosan CLH

CN Chitosan EL

CN Chitosan F

CN Chitosan FL

CN Chitosan H

CN Chitosan LL

CN Chitosan LL 80

CN Chitosan LLWP

CN Chitosan M

CN Chitosan MP

CN Chitosan SK 10

CN Chitosan VL

CN Chitosom

CN Crystan LA-S

CN CTA 1 Lactic Acid

CN CTA 4

CN DAC 50

CN DAC 70

CN Daichitosan P-VL

CN Daichitosan VL

CN Daichitosan W 10

CN Deacetylchitin

CN FCM 117

CN Flonac C

CN Flonac LV

CN Flonac N

CN HC 1

CN HC 1' (polysaccharide)

CN Hiset KW 5

CN Hydagen CMFP

CN Hydagen HCMF

CN K 5

CN K 5 (chitosan)

CN Kimitsu Chitosan F

CN Kimitsu Chitosan F 2

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 57285-05-9

MF Unspecified

CI PMS, COM, MAN

PCT Manual registration, Polyother, Polyother only

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,

CIN, CSCHM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT,
IFIUDB, IPA, MEDLINE, NAPRALERT, PHAR, PIRA, PROMT, RTECS*, TOXCENTER,
TULSA, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

9775 REFERENCES IN FILE CA (1967 TO DATE)

1850 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9802 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L8 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 9004-34-6 REGISTRY

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN .alpha.-Cellulose
CN .beta.-Amylose
CN 3mAQUACEL
CN 402-2B
CN Alicell LV
CN Alpha Cel PB 25
CN Alphafloc
CN Arbocel
CN Arbocel B 00
CN Arbocel B 600/30
CN Arbocel B 800
CN Arbocel B 820C
CN Arbocel BC 1000
CN Arbocel BC 200
CN Arbocel BE 600
CN Arbocel BE 600/10
CN Arbocel BE 600/20
CN Arbocel BE 600/30
CN Arbocel BEM
CN Arbocel BFC 200
CN Arbocel BWW 40
CN Arbocel DC 1000
CN Arbocel FD 00
CN Arbocel FD 600/30
CN Arbocel FIC 200
CN Arbocel FT 40
CN Arbocel FT 600/30H
CN Arbocel TF 30HG
CN Arbocel TP 40
CN Avicel
CN Avicel 101
CN Avicel 102
CN Avicel 2330
CN Avicel 2331
CN Avicel 955
CN Avicel CL 611
CN Avicel E 200
CN Avicel F 20
CN Avicel FD 100
CN Avicel FD 101
CN Avicel FD-F 20
CN Avicel M 06
CN Avicel M 15
CN Avicel M 25
CN Avicel PH 101
CN Avicel PH 102

CN Avicel PH 105
CN Avicel PH 200
CN Avicel PH 301
CN Avicel PH 302

CN **Crystalline cellulose**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 12656-52-9, 9012-19-5, 9037-50-7, 9076-30-6, 58968-67-5, 99331-82-5,
67016-75-5, 67016-76-6, 51395-76-7, 61991-21-7, 61991-22-8, 68073-05-2,
70225-79-5, 74623-16-8, 75398-83-3, 77907-70-1, 84503-75-3, 89468-66-6,
39394-43-9

MF Unspecified

CI PMS, COM, MAN

PCT Manual registration, Polyother, Polyother only

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
CHEMSAFE, CIN, CSCHM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC,
PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL,
VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

55266 REFERENCES IN FILE CA (1967 TO DATE)

6773 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

55313 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L8 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 1398-61-4 REGISTRY

CN **Chitin (8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN Chitan, N-acetyl-

CN Chitin Tc-L

CN Clandosan

CN Kimitsu Chitin

CN Regitex FA

DR 9043-70-3, 191802-95-6

MF Unspecified

CI COM, MAN

LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA,
CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHM,
CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
NAPRALERT, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

5890 REFERENCES IN FILE CA (1967 TO DATE)

782 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5901 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 9005-25-8 REGISTRY

CN **Starch (8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN .alpha.-Starch
CN Absorbo HP
CN Actobody TP 2
CN Aeromyl 115
CN Agglofroid 009
CN Agglofroid 313E
CN Allbond 200
CN Alphajel KS 37
CN Alstar B
CN Amaizo 100
CN Amaizo 213
CN Amaizo 310
CN Amaizo 5
CN Amaizo 71
CN Amaizo 710
CN Amaizo W 13
CN Amalean I-A 2131
CN Amalean I-A 7081
CN Amicoa
CN Amidex 4001
CN Amigel
CN Amigel 12014
CN Amigel 30076
CN Amijel VA 160
CN Amilys 100
CN Amycol W
CN Amylogum
CN Amylomaize starch
CN Amylomaize VII
CN Amylon 70
CN Amylose, mixt. with amylopectin
CN Amylox 1
CN Amylum
CN Amyren 14
CN Amyren 71
CN Amysil K
CN Amyzet TK
CN Arrowroot starch
CN AS 225
CN AS 225 (starch)
CN Atomyl
CN Aytex P
CN B 200
CN Bioren 28
CN Bioren 80
CN Bioren AM 50
CN Bioren K 25
CN Bioren MS 30
CN Bioren MS 50
CN Buffalo 3401

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DEF A high-polymeric carbohydrate material primarily composed of amylopectin
and amylose. It is usually derived from cereal grains such as corn, wheat
and sorghum, and from roots and tubers such as potatoes and tapioca. It
includes starch which has been pregelatinized by heating in the presence
of water.

DR 9057-05-0, 53262-79-6, 131800-97-0, 60496-95-9, 67674-80-0, 75138-75-9,

75398-82-2, 154636-77-8, 152987-55-8, 85746-25-4, 42616-76-2, 53112-52-0
MF Unspecified
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
CIN, CSCHM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
TOXCENTER, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
49218 REFERENCES IN FILE CA (1967 TO DATE)
5711 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
49266 REFERENCES IN FILE CAPLUS (1967 TO DATE)

Water absorbing + ~~water~~ gel-forming base (B)

L4 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 9004-67-5 REGISTRY
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Adulsin
CN Avicel SG
CN Bagolax
CN Benecel M 0
CN Benecel M 02
CN Benecel MC 4000PS
CN Benecel MO 42
CN Bufapto Methalose
CN Bulkaloid
CN Celacol M
CN Celacol M 20
CN Celacol M 20P
CN Celacol M 2500
CN Celacol M 450
CN Celacol MM
CN Celacol MM 10P
CN Celacol MMPR
CN Celacol WA
CN Cellapret
CN Cellogran
CN Cellothyl
CN Cellulose methyrate
CN Cellumeth
CN Cesca C 8556
CN Cesca MC 25S
CN Cesca MC 400
CN Cethylose
CN Cethytin
CN Culminal K 42
CN Culminal MC
CN Culminal MC 2000
CN Culminal MC 25S
CN Culminal MC 3000P
CN Culminal MC 3000PR
CN Culminal MC 40
CN Culminal MC 60S
CN Daicel 170
CN Edisol M
CN EMP-H
CN Hi-SM 4000
CN Hydrolase
CN M 100
CN M 100 (cellulose derivative)
CN M 15
CN M 15 (cellulose derivative)
CN Marpolose 60SH50
CN Marpolose 90MP10000
CN Marpolose 90MP30000
CN Marpolose Ace
CN Marpolose EM 2000
CN **Methylcellulose**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 53568-34-6, 71812-19-6, 88402-84-0, 39384-65-1, 99638-59-2
MF C H4 O . x Unspecified

CI COM

PCT Manual registration, Polyother, Polyother only

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,

CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, TSCA**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O

H₃C-OH

9508 REFERENCES IN FILE CA (1967 TO DATE)

184 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9516 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L4 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 9004-64-2 REGISTRY

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2-Hydroxypropyl cellulose

CN Aqualon Klucel L

CN Cellulose hydroxypropyl ether

CN EF 10

CN EF 10 (cellulose derivative)

CN Fuji HEC-SG 25F

CN G 4000HXL

CN HPC

CN HPC-E

CN HPC-E (cellulose derivative)

CN HPC-EF-G

CN HPC-H

CN HPC-L

CN HPC-LE-G

CN HPC-LG

CN HPC-LR

CN HPC-M

CN HPC-MF

CN HPC-MG

CN HPC-S

CN HPC-S (cellulose derivative)

CN HPC-SL

CN HPC-SSL

CN Hydropropyl cellulose

CN **Hydroxypropyl cellulose**

CN Hydroxypropyl cellulose ether

CN Hydroxypropyl ether of cellulose

CN Hyprolose

CN JK 491
 CN Klucel
 CN Klucel 98 HF-EP
 CN Klucel 99 MF-EP
 CN Klucel 99E
 CN Klucel 99EF
 CN Klucel 99G
 CN Klucel 99GF-EP
 CN Klucel 99M
 CN Klucel E
 CN Klucel E 5
 CN Klucel EEL
 CN Klucel EF
 CN Klucel EXF
 CN Klucel G
 CN Klucel Gf
 CN Klucel H
 CN Klucel HF
 CN Klucel HF-NF
 CN Klucel HW
 CN Klucel HXF
 CN Klucel J

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 9076-24-8, 173523-78-9, 65742-73-6, 78214-41-2, 150873-09-9, 192006-47-6, 193561-69-2, 210920-15-3

MF C3 H8 O2 . x Unspecified

CI COM

PCT Manual registration, Polyother, Polyother only

LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)

Other Sources: DSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 9004-34-6

CMF Unspecified

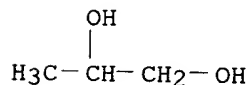
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6

CMF C3 H8 O2



6227 REFERENCES IN FILE CA (1967 TO DATE)

155 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

6235 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L4 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 9004-32-4 REGISTRY

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 12M31XP
 CN 1400LC
 CN 2000MH
 CN 7H3SF
 CN 7H3SX
 CN 7H4XF
 CN 9H4XF
 CN A 0111
 CN A 01H
 CN A 01L
 CN A 01M
 CN A 02SH
 CN A 10M
 CN A 50M
 CN AG Gum
 CN AG Gum HG
 CN AG Gum LV 1
 CN AG Gum LV 2
 CN AKU-W 515
 CN Akucell 07071
 CN Akucell AF 2205
 CN Akucell AF 2805
 CN Akucell AF 2881
 CN Ambergum 1221
 CN Ambergum 1521
 CN Ambergum 1570
 CN Ambergum 3021
 CN Ambergum 99-3021
 CN AOIH
 CN Aquacel Hydrofiber
 CN Aquacide I
 CN Aquacide II
 CN Aqualon 12M31
 CN Aqualon 7H
 CN Aqualon 7HF
 CN Aqualon 7LF-PH
 CN Aqualon 7M2
 CN Aqualon CMC 12M8
 CN Aqualon CMC 7H
 CN Aqualon CMC 7H4F
 CN Aqualon CMC 7H4XF
 CN Aqualon CMC 7HCF
 CN Aqualon CMC 7HX
 CN Aqualon CMC 7L
 CN Aqualon CMC 7LT
 CN Aqualon CMC 7M
 CN Aqualon CMC 9H4F
 CN Aquaplast
 CN Aquasorb F-C
 CN Aquasorb F-R
 CN **Sodium carboxymethyl cellulose**
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
 DISPLAY
 DR 12624-09-8, 9045-95-8, 9085-26-1, 54018-17-6, 55607-96-0, 50642-44-9,
 37231-14-4, 37231-15-5, 73699-63-5, 80296-93-1, 82197-79-3, 81209-86-1,
 117385-93-0, 198084-97-8, 247080-55-3
 MF C2 H4 O3 . x Na . x Unspecified
 CI COM
 PCT Manual registration, Polyester, Polyester formed
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,

CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
CIN, CSCHEM, CSNB, DETHERM*, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB,
IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

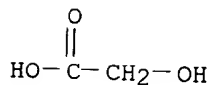
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
CMF C2 H4 O3



18416 REFERENCES IN FILE CA (1967 TO DATE)
622 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18420 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 9004-62-0 REGISTRY
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:

CN 2-Hydroxyethyl cellulose
CN 2-Hydroxyethyl cellulose ether
CN 250HR
CN 250LR
CN Admiral 3089FS
CN AH 15
CN AL 15
CN Aqualon HEC
CN AW 15
CN AW 15 (polysaccharide)
CN AX 15
CN BL 15
CN BL 15 (cellulose derivative)
CN Cellobond 25T
CN Cellobond 45000A
CN Cellobond HEC 15A
CN Cellobond HEC 400
CN Cellobond HEC 5000
CN Cellosize
CN Cellosize 4400H16
CN Cellosize DP 40
CN Cellosize HEC 4400
CN Cellosize HEC-QP 15000H
CN Cellosize HEC-QP 30000H
CN Cellosize HEC-QP 52000H
CN Cellosize HEC/QP-09-L
CN Cellosize OP 09
CN Cellosize QP
CN Cellosize QP 09H
CN Cellosize QP 10000
CN Cellosize QP 100M
CN Cellosize QP 100MH
CN Cellosize QP 1500
CN Cellosize QP 15000
CN Cellosize QP 15000H
CN Cellosize QP 15MH
CN Cellosize QP 3
CN Cellosize QP 300
CN Cellosize QP 30000
CN Cellosize QP 300H
CN Cellosize QP 3L
CN Cellosize QP 40
CN Cellosize QP 40L
CN Cellosize QP 4400
CN Cellosize QP 4400H
CN Cellosize QP 52000
CN Cellosize QP 52000H
CN Cellosize QP 5200W1930X
CN Cellosize QR 4400H
CN Cellosize TJC 500
CN **Hydroxyethyl cellulose**
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY
DR 12772-61-1, 9045-96-9, 163648-13-3, 173523-80-3, 97105-13-0, 72146-24-8,
86168-41-4, 53124-21-3, 53124-22-4, 53149-00-1, 168679-18-3, 189832-76-6
MF C2 H6 O2 . x Unspecified
CI COM
PCT Manual registration, Polyother, Polyother only

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN,
CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN,
USPAT2, USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1

CMF C2 H6 O2

HO-CH₂-CH₂-OH

7058 REFERENCES IN FILE CA (1967 TO DATE)

491 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

7064 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L45 ANSWER 4 OF 11 USPATFULL

ACCESSION NUMBER:

1999:132279 USPATFULL

TITLE:

Ultrafine particle power for inhalation and method for
production thereof

INVENTOR(S):

Sakon, Kiyoyuki, Hino, Japan
Sakagami, Masahiro, Hino, Japan
Makino, Yuji, Hino, Japan
Suzuki, Yoshiki, Hino, Japan

PATENT ASSIGNEE(S):

Kobayashi, Hideki, Hino, Japan
Teijin Limited, Osaka, Japan (non-U.S. corporation)

NUMBER

KIND

DATE

PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.:

US 5972388 19991026
US 1997-779614 19970107 (8)
Continuation of Ser. No. US 193181

NUMBER

DATE

PRIORITY INFORMATION:

JP 1992-153538 19920612
JP 1992-215133 19920812

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Harrison, Robert H.

LEGAL REPRESENTATIVE:

Sughrue, Mion, Zinn, Macpeak & Seas, PLLC

NUMBER OF CLAIMS:

8

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

6 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT:

929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FILE 'HOME' ENTERED AT 11:53:04 ON 07 MAY 2002)

FILE 'REGISTRY' ENTERED AT 11:53:16 ON 07 MAY 2002

L1 E HYDROXYPROPYLCELLULOSE/CN
E HYDROXYPROPYL CELLULOSE/CN
1 S E3
E HYDROXYPROPYLMETHYL CELLULOSE/CN
E HYDROXYPROPYLMETHYLCELLULOSE/CN
E HYDROXYPROPYL METHYLCELLULOSE/CN
E METHYLHYDROXYPROPYL CELLULOSE/CN
E METHYLCELLULOSE/CN
L2 1 S E3
E SODIUM CARBOXYMETHYL CELLULOSE/CN
L3 1 S E3
L4 3 S L1 OR L2 OR L3
E CRYSTALLINE CELLULOSE/CN
L5 1 S E3
E .ALPHA.CELLULOSE/CN
E CELLULOSE/CN
E CELLULOSE .ALPHA./CN
E SODIUM CARBOXYMETHYL CELLULOSE/CN
E CROSSLINKED SODIUM CARBOXYMETHYL CELLULOSE/CN
E CROSSLINKED STARCH/CN
E STARCH/CN
E STARCH CROSSLINKED/CN
E CHITIN/CN
L6 1 S E3
E CHITOSAN/CN
L7 1 S E3
L8 3 S L5 OR L6 OR L7

FILE 'USPATFULL, CAPLUS, CAOLD' ENTERED AT 11:58:17 ON 07 MAY 2002

L9 5217 S (POWDER OR POWDERY) (P) (?NASAL OR ?NASALLY)
L10 34354 S 9004-67-5/RN OR 9004-64-2/RN OR 9004-32-4/RN
L11 85653 S METHYLCELLULOSE OR HYDROXYPROPYLCELLULOSE OR HYDROXYPROPYLCELLU
L12 251 S (SODIUMCARBOXY OR (SODIUM (W) CARBOXY)) (W) METHYLCELLULOSE
L13 102161 S L10 OR L11 OR L12
L14 68215 S 9012-76-4/RN OR 9004-34-6/RN OR 1398-61-4/RN
L15 498539 S CHITOSAN OR ACETYLCHITAN OR DEACTYLCHITIN OR .ALPHA.CELLULOSE

FILE 'REGISTRY' ENTERED AT 12:05:43 ON 07 MAY 2002

E HYDROXYETHYLCELLULOSE/CN
E HYDROXYETHYL CELLULOSE/CN
L16 1 S E3

FILE 'USPATFULL, CAPLUS, CAOLD' ENTERED AT 12:06:23 ON 07 MAY 2002

L17 45301 S HYDROXYETHYLCELLULOSE OR ((HYDROXYETHYL OR HYDROXYPROPYLMETHY
L18 119979 S L13 OR L17
L19 31063 S 9004-32-4/RN OR SODIUMCARBOXYMETHYLCELLULOSE OR ((SODIUMCARBO

FILE 'REGISTRY' ENTERED AT 12:09:25 ON 07 MAY 2002

E STARCH/CN
L20 1 S E3

FILE 'USPATFULL, CAPLUS, CAOLD' ENTERED AT 12:09:53 ON 07 MAY 2002

L21 246337 S STARCH OR 9005-25-8/RN
L22 376516 S CROSSLINK? OR (CROSS (W) LINK?)
L23 324 S L20 (3A) L22
L24 6005 S L21 (3A) L22
L25 1366 S L19 (3A) L22
L26 506151 S L14 OR L15 OR L24 OR L25

CLAIM ANALYSIS MATRIX

2/27/96

Application Number		Effective Date		Claim								Sheet
09/25/84		2/26/97		(40)(8)	(40)(8)	(40)(8)	(40)(8)	(40)(8)	(40)(8)	(40)(8)	(40)(8)	
Title												
				(A)	(B)	(C)	Limitation		(A) more on	≥ 70 wt % drug on given	≥ 80 wt % drug and	of
Reference		Effective Date					(B) + (C)	(C)				
1				powdery	drug	HPG, HPMU, ME, HEC, NaCMC	carboxylic acid, α-cellulose, dimethylsiloxane, starch, gelatin	5-40 wt % (B) bound on	(A) more on (C)	≥ 70 wt % drug on given (B) + (C)	≥ 80 wt % drug and (B) + (C)	
2												
3												
4												
5												
6												
7												
8												
9												
10												

PET

CLAIM ANALYSIS MATRIX

Application Number		Effective Date		Claim										Sheet	
Title				<div> <div>260 w/o. duryan or in (b) d/c)</div> <div>make pcta. of (c) larger than (b)</div> <div>290 w/10 pcta d/c at 10-300 sum avg.</div> <div>290 w/10 pcta. of B. at 10-105 sum avg.</div> <div>290 w/10 d pcta avg. 10-250 sum</div> <div>290 w/10 d pcta avg 10-165 sum</div> <div>(A) no pcta d pcta or non-pcta d pcta</div> <div>no d of A no ≤ 30, 100</div> </div>										<div> <div>—</div> <div>of</div> <div>—</div> </div>	
Reference	Effective Date	Limitation												Section 102	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

CLAIM ANALYSIS MATRIX

Application Number		Effective Date		Claim								Sheet
Title	Reference	Effective Date	non-aptidyl/ non-protein drug is	peptidyl/ protein drug is	peptidyl/ protein drug is	MW of drug is 200-1500	5-30 kDa or (B) broad (A) & (C)	penetration, Rt releasing humoral, effector	peptidyl/ protein drug	MW of drug is 1500-3000	of — —	
1								Section 102	
2												
3												
4												
5												
6												
7												
8												
9												
10												

PAT

CLAIM ANALYSIS MATRIX

Application Number		Effective Date		Claim										Sheet	
Title				102/90 , 84/67 , 103/42 , 87/86 , 14/140 , 98/01 , 105/46 , 84/42 , 102/15 , 90/89 , 98/46											
				5-20 wt % (b) hard on (a) + (c)											
				dry so											
				(c) is crystalline cellulose											
				(b) is HPE											
				HPE is 50-9000000 in 2% of mol.											
Reference		Effective Date		Limitation										of	
1														Section 102	
2															
3															
4															
5															
6															
7															
8															
9															
10															

PET